Aberdeen Plant Materials Center INTERMOUNTAIN PLANT NOTES 2006







A newsletter to inform you about activities at the Aberdeen Plant Materials Center

WHO WE ARE

The Aberdeen Plant Materials
Center (PMC) was established in
1939 to develop plant materials
and techniques for establishment
and management of plants for use
in resource conservation activities
in the Western United States.
Currently, there are 27 PMCs
nationwide, each serving a specific
geographic and ecological area.
The Aberdeen PMC serves
portions of the Intermountain West
including southern Idaho, western
Utah and parts of northern Nevada
and southeastern Oregon.



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FALLON, NV: PMC NUMBER 27

In 2006, a new PMC was added to the ranks of the NRCS Plant Materials Program. The Fallon PMC, located in western Nevada, will serve the western Great Basin including most of Nevada and small portions of California, Oregon and Utah. As a result, the geographic boundaries of the Aberdeen PMC service area have been adjusted (see map above). Our new service area boundaries cover the eastern portion of the Great Basin and Intermountain West including southern Idaho, western Utah and small portions of Oregon and Nevada. The new Fallon PMC will allow western PMCs to better focus on selecting plants and developing practices for their specific ecoregions.

The staff at the Aberdeen PMC has been a valuable resource of information in assisting with the development of the new Fallon PMC. Aberdeen staff have helped Nevada NRCS and the Fallon PMC with site and building specifications, materials procurement and planning for the initial phase of operations.

SEED PRODUCTION

The PMC continues to produce Breeder and Foundation seed from 19 plant releases. Last year we established new seed fields of Maple Grove Selection Lewis flax, Anatone bluebunch wheatgrass and Bannock thickspike wheatgrass. This year we have plans to put in new fields of 'Delar' small burnet, Maple Grove Lewis flax, 'Bannock' thickspike wheatgrass, 'Goldar' bluebunch wheatgrass, and 'Magnar' basin wildrye. Foundation seed requests should be made to the University of Idaho Foundation Seed Program or Utah Crop Improvement Association.

GREAT BASIN FORB PROJECT



During the fall of 2005, the PMC planted seed increase fields of seven native forbs for further evaluation and selection in cooperation with the Great Basin Native Plant Selection and Increase Project. Sulphurflower buckwheat, fernleaf biscuitroot, Gray's biscuitroot, nineleaf biscuitroot, sand penstemon, hotrock penstemon and sagebrush penstemon were seeded into weed barrier fabric using the "Penstemon Popper" seeder. During initial evaluations this spring we are seeing promising emergence from several of the species, and hope to start collecting additional seed in the summer of 2007 from the most promising accessions.

SULPHURFLOWER BUCKWHEAT COMMON GARDEN STUDY

The PMC is beginning a common garden study of sulphurflower buckwheat (*Eriogonum umbellatum*) with the goal of a selected class release in the near future. Sulphurflower buckwheat is a perennial forb native to sagebrush and mountain shrub plant communities in the western states. Its showy yellow flowers bloom in early summer, and seed is mature and ready to collect in late July through mid August. This species is considered to be important to the survival of sage grouse (*Centrocercus urophasianus*) whose chicks feed on insects attracted by the flowers. A sulphurflower buckwheat release would also complement the limited selection of native forbs that restorationists have at their disposal for increasing biodiversity. We have plans to make wildland seed collections this summer and to plant the initial study in the fall of 2006. We would appreciate your assistance in making seed collections or in providing us location information of promising populations. Please contact Derek Tilley or Loren St. John at the PMC or Dan Ogle at the Idaho state office if you can help.



MUTTONGRASS ADVANCED EVALUATION PLANTING



This spring the PMC is also starting an advanced evaluation planting of muttongrass (*Poa fendleriana*). This species of bluegrass is common in piñon-juniper and sagebrush communities within the Aberdeen and Fallon PMC service areas, but its range extends from British Columbia to Texas and east to the Dakotas. Muttongrass plants are readily grazed by livestock and wildlife in spring and have good erosion control qualities. We are comparing a collection that was made near Caliente, NV that was the best performing accession from an initial evaluation study conducted several years ago, against some accessions that other plant researchers have been evaluating. A release of this species would be very useful in restoring native species diversity, especially in sagebrush or piñon-juniper plant communities.

CRESTED WHEATGRASS DIVERSIFICATION PROJECT

During the fall of 2005, the PMC began a cooperative effort with the Great Basin Native Plant Selection and Increase Project, Brigham Young University and the Agricultural Research Service (Burns, OR). The goal of this project is to develop technology to improve the diversity of introduced grass stands by evaluating methods of introducing native species into stabilized non-native plant communities. For our part of the project the PMC modified a Truax Roughrider range drill, mixed the seed and rice hull mixtures and completed seedings at sites in Utah and Oregon. The seeding was designed as an alternate row seeding with broadcast species (Wyoming big sagebrush, rabbitbrush, yarrow and Sandberg bluegrass) and drilled species (fourwing saltbush, blue flax, globemallow, bluebunch wheatgrass, bottlebrush squirreltail, and Indian ricegrass). The different seedbed treatments are one-



way disk, two-way disk, herbicide application, and a control. The seedings will be evaluated by the cooperators. Seedings will take place again this coming fall so that there will be 2 seeding years to evaluate the different seedbed treatments. In addition a new test site near Elko, Nevada will be included in this study and planted this fall.

RECENT PUBLICATIONS

There are several new or revised publications from the Aberdeen PMC available to download as pdf files at our website. Some of these include:

- The new Aberdeen PMC brochure
- Technical Note 10 Pasture and Range Seedings, Planning-Installation-Evaluation
- Technical Note 24 (revised) Grass, Grass-like, Forb, Legume, and Woody Species for the Intermountain West
- Technical Note 49 Weed Control in Woody Plantings: Herbicides and Application Techniques
- Plant Guides for Lewis and Blue Flax, Bottlebrush Squirreltail and Big Sagebrush
- Plant Fact Sheets for Alkali Bulrush and Common Threesquare
- 2005 Annual Technical Report
- Coming soon: Plant Fact Sheets for Creeping spikerush, Nebraska sedge, Baltic rush and Hardstem bulrush. Also
 Plant Guides for Forage kochia, Thurber's needlegrass, Needle and Thread, Prairie Junegrass, and a revised
 Technical Note 25 Function and Operation of a Machine to Lay Weed Barrier Material

There are also two new articles authored by the Aberdeen PMC in the Native Plants Journal. These can be viewed by visiting the Native Plants Journal website at: http://www.nativeplantnetwork.org/

- Tilley, DJ and JC Hoag. 2007. Comparison of methods for direct seeding of Nebraska sedge (*Carex nebrascensis* Dewey [Cyperaceae]) and Baltic rush (*Juncus balticus* Willd. [Juncaceae]). Native Plants Journal. 7 (1): 95-99.
- Hoag, JC. 2007. The pot planter: a new attachment for the Waterjet Stinger. Native Plants Journal. 7 (1): 100-101.

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